

**Effective Date:   Fall 2009-2010**

**Course Description**

Prerequisite: A grade of “C” or higher in BIOL 1201. General concepts in ecology and the diversity of life, including a survey of living organisms. Also reinforces use of the scientific process. Students cannot use both this course and BIOL 1002 and 1004 to meet a degree’s requirements..

**Course Objectives**

1. Understand evolutionary concepts and how evolutionary and ecological processes have produced diversity.
2. Understand general ecological principles at the population, community, and ecosystem level.

**Procedures to Evaluate these Objectives**

1. Written examinations on lecture topics.
2. Laboratory exams, lab reports, or projects.
3. Observation of student performance in the laboratory setting.

**Use of Results of Evaluation to Improve the Course**

1. Results of written exams on lecture topics will be used to identify necessary changes in the treatment of these topics.
2. Results of laboratory practical exams, lab reports or projects will be used to make any necessary adjustments to the coverage of topics in the laboratory and to relating laboratory experiences to the scientific method.
3. Observation of student laboratory performance will be used to identify ways to improve laboratory instruction.

**Detailed Topical Outline**

1. Introduction: classification
2. Viruses
3. Bacteria
4. Protista
5. Fungi
6. Plants
7. Acoelomates

8. Pseudocoelomates
9. Mollusca
10. Annelida
11. Arthropoda
12. Echinodermata
13. Chordata
14. Ecology

**Detailed Topical Outline for the Laboratory**

1. Bacteria
2. Protists
3. Fungi and Bryophytes
4. Vascular Plants: Ferns and Gymnosperms
5. Vascular Plants: Angiosperms
6. Acoelomates and Pseudocoelomates
7. Mollusca and Annelida
8. Arthropoda
9. Echinodermata and Chordata
10. Population Ecology
11. Community Ecology
12. Ecosystem Ecology